Electronic Version
Stylesheet Version v1.1.1

Claims

[c1] What is claimed is:

1. A ceramic susceptor for semiconductor manufacturing equipment, the ceramic susceptor comprising:
a ceramic substrate, one side thereof having wafer-retaining face;
a resistive heating element provided either superficially or interiorly in said substrate; and
a recess formed in said wafer-retaining face with room to carry a semiconductor manufacturing wafer, said recess being contoured either so that its perimetric wall meets its bottom face to form an angle of over 90° and 170° or less, or so that its perimetric wall and its bottom face join in a bottom-portion circumferential verge having a curvature of 0.1 mm or more.

[c2] 2. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 1, wherein said ceramic substrate is made of at least one selected from aluminum nitride, silicon nitride, aluminum oxynitride, and silicon carbide.

[c3] 3. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 1, wherein said resistive

heating element is made from at least one selected from tungsten, molybdenum, platinum, palladium, silver, nickel, and chrome.

[c4] 4. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 2, wherein said resistive heating element is made from at least one selected from tungsten, molybdenum, platinum, palladium, silver, nickel, and chrome.

[c5] 5. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 1, further comprising a plasma electrode disposed either superficially or interiorly in said ceramic substrate.

[c6] 6. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 2, further comprising a plasma electrode disposed either superficially or interiorly in said ceramic substrate.

[c7] 7. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 3, further comprising a plasma electrode disposed either superficially or interiorly in said ceramic substrate.

[c8] 8. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 4, further comprising a plasma electrode disposed either superficially or interi-

orly in said ceramic substrate.

[c9] 9. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 1, wherein said recess is contoured both so that its perimetric wall meets its bottom face to form an angle of over 90° and 170° or less, and so that its perimetric wall and its bottom face join in a bottom-portion circumferential rim having a curvature of 0.1 mm or more.

[c10] 10. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 9, wherein said ceramic substrate is made of at least one selected from aluminum nitride, silicon nitride, aluminum oxynitride, and silicon carbide.

[c11] 11. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 9, wherein said resistive heating element is made from at least one selected from tungsten, molybdenum, platinum, palladium, silver, nickel, and chrome.

[c12] 12. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 10, wherein said resistive heating element is made from at least one selected from tungsten, molybdenum, platinum, palladium, silver, nickel, and chrome.

[c13] 13. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 9, further comprising a plasma electrode disposed either superficially or interiorly in said ceramic substrate.

[c14] 14. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 10, further comprising a plasma electrode disposed either superficially or interiorly in said ceramic substrate.

[c15] 15. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 11, further comprising a plasma electrode disposed either superficially or interiorly in said ceramic substrate.

[c16] 16. A semiconductor-manufacturing-equipment ceramic susceptor as set forth in claim 12, further comprising a plasma electrode disposed either superficially or interiorly in said ceramic substrate.